



Lake Erie Harmful Algal Bloom Bulletin

24 September, 2018, Bulletin 28

Analysis

The *Microcystis* cyanobacteria bloom continues in the western basin of Lake Erie. Recent satellite imagery (9/23) indicates detectable (but relatively low) concentrations of the bloom extending 5 miles north and 12 miles east from the Maumee Bay. Winds observed over the weekend (9/22-23) promoted mixing of *Microcystis* concentrations. Toxin concentrations remain below the recreational threshold. *Keep pets and yourself out of the water in areas where scum is forming.* The persistent cyanobacteria bloom in Sandusky Bay continues.

Forecasts

Winds (12-22 kn) forecast today through Wednesday (9/24-26) will promote mixing of surface waters and northward transport of *Microcystis* concentrations. --Davis, Lalime

Additional Resources

To find a safe place for recreation, visit the Ohio DOH "BeachGuard" site: <http://publicapps.odh.ohio.gov/beachguardpublic/>

Ohio EPA's site on harmful algal blooms: <http://epa.ohio.gov/HAB-Algae>

NOAA's GLERL provides additional HAB data here: http://www.glerl.noaa.gov/res/HABs_and_Hypoxia

The images below are "GeoPDF". Please visit <https://go.usa.gov/xReTC> for instructions on viewing longitude and latitude.

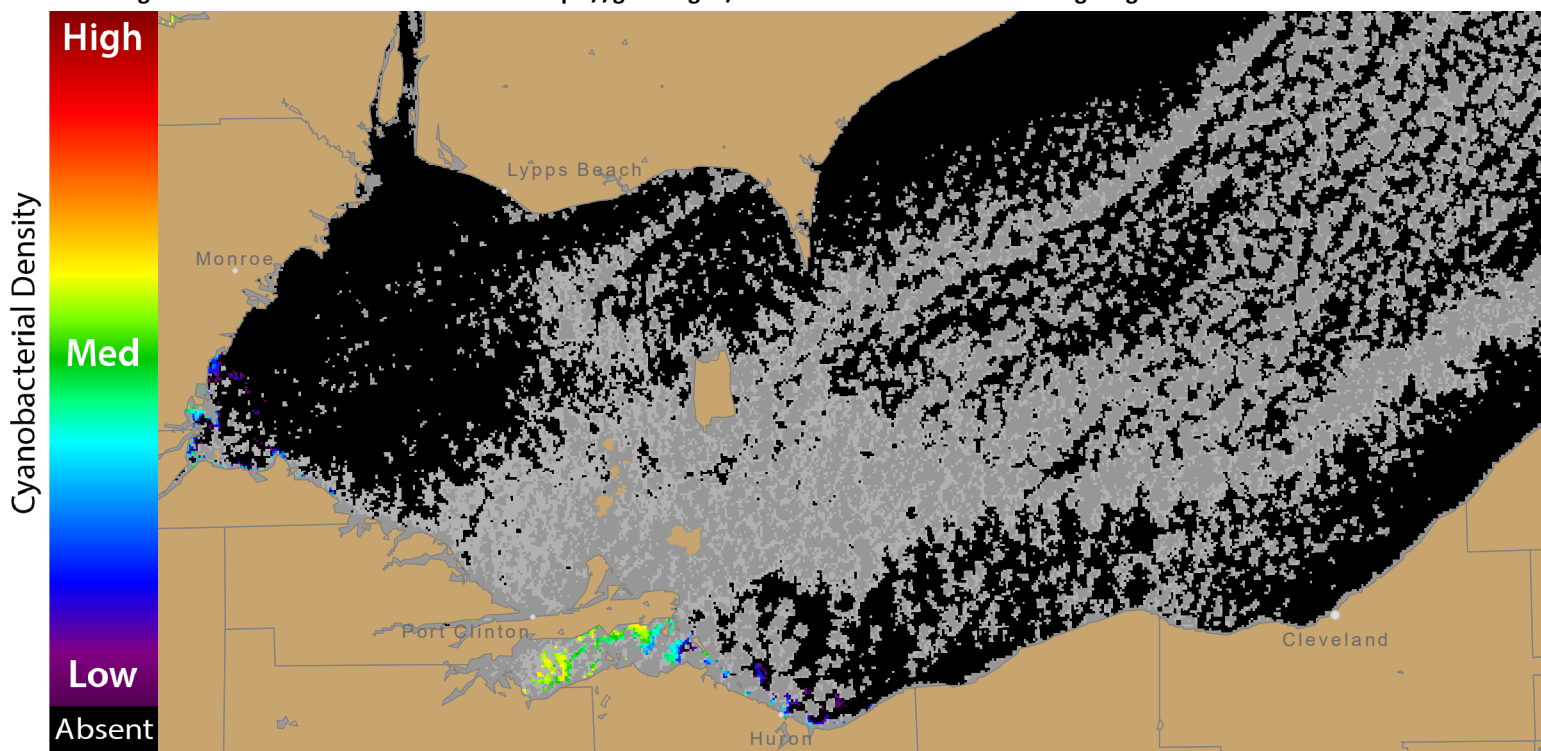


Figure 1. Cyanobacterial Index from modified Copernicus Sentinel 3 data collected 23 September, 2018 at 12:08 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

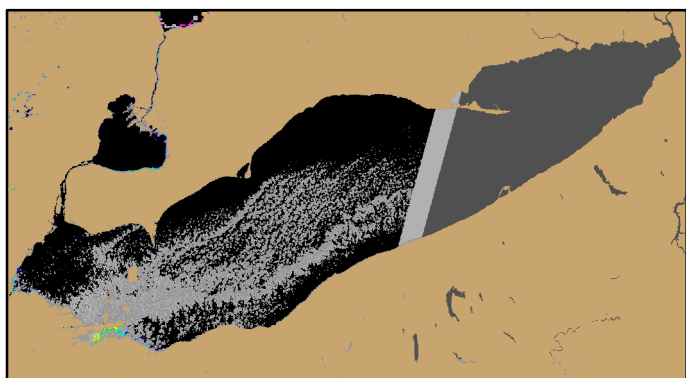
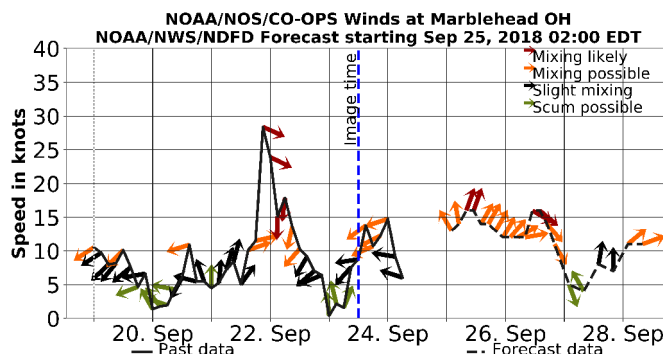


Figure 2. Cyanobacterial Index from modified Copernicus Sentinel 3 data collected 23 September, 2018 at 12:08.



Wind speed and direction from Marblehead, OH. Blooms mix through the water column at wind speeds greater than 15 knots (or 7.7 m/s).

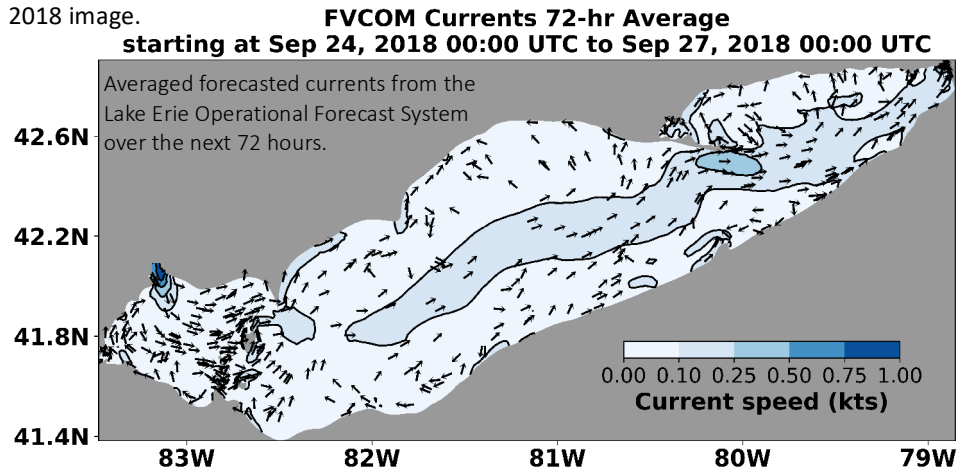
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Figure 3. Nowcast position of bloom for 24 September, 2018 using LEOFS modelled currents to move the bloom from the 23 September,



Figure 4. Forecast position of bloom for 27 September, 2018 using LEOFS modelled currents to move the bloom from the 23 September, 2018 image.



For more information and to subscribe, please visit the NOAA HAB Forecast page:
<https://tidesandcurrents.noaa.gov/hab/lakeerie.html>